

CLAIM LISTING

Claim 1 (Currently Amended): A plant comprising a cell comprising a functional mammalian enzyme or functional fragment thereof providing N-glycan biosynthesis additionally having been provided with an expression vector comprising a nucleic acid encoding a thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof.

Claim 2 (Original): A plant according to claim 1 wherein said enzyme comprises human β 1,4-galactosyltransferase.

Claim 3 (Currently Amended): A plant according to claim 1 [[or 2]] wherein said thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof comprises an extended N-linked glycan.

Claim 4 (Original): A plant according to claim 3 wherein a said extended N-linked glycan comprises galactose.

Claim 5 (Original): A plant according to claim 4 wherein a said extended N-linked glycan is devoid of xylose.

Claim 6 (Original): A plant according to claim 4 wherein a said extended N-linked glycan is devoid of fucose.

Claim 7 (Currently Amended): A plant according to ~~anyone of claims 1 to 6~~ claim 1 wherein said expression vector is derived from a plant virus.

Claim 8 (Original): A plant according to claim 7 wherein said virus is a tobamovirus such as tobacco mosaic virus.

Claim 9 (Currently Amended): A plant according to ~~anyone of claims 1 to 8~~ claim 1 which comprises a tobacco plant.

Claim 10 (Cancelled): Cancelled

Claim 11 (Currently Amended): Use of a plant according to ~~anyone of claims 1 to 10~~ ~~claim 1~~ to produce a desired thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof.

Claim 12 (Currently Amended): Use according to claim 11 wherein said thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof comprises an extended N-linked glycan [[et]] at least comprising galactose.

Claim 13 (Currently Amended): A method for obtaining a desired thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof comprising cultivating a plant according to ~~anyone of claims 1 to 10~~ ~~claim 1~~ until said plant has reached a harvestable stage, harvesting and fractionating said plant to obtain fractionated plant material and at least partly isolating said thyroid-stimulating hormone or gonadotrophin or gonadotrophin-receptor from said fractionated plant material.

Claim 14 (Original): A plant-derived thyroid-stimulating hormone or gonadotrophin or gonadotrophin-receptor or functional fragment thereof comprising an extended N-linked glycan at least comprising galactose.

Claim 15 (Currently Amended): A plant-derived thyroid-stimulating hormone ~~or gonadotrophin~~ or gonadotrophin-receptor or functional fragment thereof obtained by a method according to claim 13.

Claim 16 (Currently Amended): Use of a thyroid-stimulating hormone or gonadotrophin or gonadotrophin-receptor or functional fragment thereof according to claim 14 [[or 15]] for the production of a pharmaceutical composition.

Claim 17 (Currently Amended): Use of a gonadotrophin or gonadotrophin-receptor or functional fragment thereof according to claim 14 [[or 15]] for the production of a pharmaceutical composition for the treatment of a reproductive disorder.

Claim 18 (Original): A pharmaceutical composition comprising a thyroid-stimulating hormone or gonadotrophin or gonadotrophin-receptor or functional fragment thereof according to claim 14 [[or 15]].

Claim 19 (New): Use of a thyroid-stimulating hormone or gonadotrophin-receptor or functional fragment thereof according to claim 15 for the production of a pharmaceutical composition.

Claim 20 (New): Use of a gonadotrophin-receptor or functional fragment thereof according to claim 15 for the production of a pharmaceutical composition for the treatment of a reproductive disorder.

Claim 21 (New): A pharmaceutical composition comprising a thyroid-stimulating hormone or gonadotrophin-receptor or functional fragment thereof according to claim 15.